Title

Use of alternative therapies for menopause symptoms: results of a population-based survey

Journal

Obstetrics & Gynecology, 100(1)

ISSN

0029-7844

Author

Newton, K

Publication Date

2002-07-01

DOI

10.1016/s0029-7844(02)02005-7

Peer reviewed

ORIGINAL RESEARCH

Use of Alternative Therapies for Menopause Symptoms: Results of a Population-Based Survey

Katherine M. Newton, PhD, Diana S. M. Buist, PhD, Nora L. Keenan, PhD, Lynda A. Anderson, PhD, and Andrea Z. LaCroix, PhD

OBJECTIVE: To describe self-reported prevalence of the use of alternative therapies for menopause symptoms and subject characteristics associated with their use.

METHODS: A telephone survey of 886 women aged 45–65 years (87.2% response rate) was conducted at Group Health Cooperative in Washington state. Women were asked about eight alternative therapies and their use for menopause symptoms.

RESULTS: The proportion of women who used each therapy was 76.1% for any therapy, 43.1% for stress management, 37.0% for over-the-counter alternative remedies, 31.6% for chiropractic, 29.5% for massage therapy, 22.9% for dietary soy, 10.4% for acupuncture, 9.4% for naturopath or homeopath, and 4.6% for herbalists. The proportion of women who used it to manage menopause symptoms was 22.1% for any therapy, 9.1% for stress management, 13.1% for over-the-counter alternative remedies, 0.9% for chiropractic, 2.6% for massage therapy, 7.4% for dietary soy, 0.6% for acupuncture, 2.0% for naturopath or homeopath, and 1.2% for herbalists. Among women who used these therapies, 89–100% found them to be somewhat or very helpful. A history of breast cancer was associated with a six-fold increase in use of dietary soy for menopause symptoms (odds ratio 6.23, 95% confidence limits 2.54, 15.28). Current users of hormone replacement therapy were half as likely to use alternative remedies or providers (odds ratio 0.48, 95% confidence limits 0.29, 0.77) as were never users. Sleep disturbances were associated with a four-fold increase in the use of body work, a three-fold increase in the use of stress management, and more than doubled the use of dietary soy products to manage menopause symptoms.

CONCLUSION: The use of alternative therapies for menopause symptoms is common, and women who use them generally find them to be beneficial. Physicians should routinely ascertain perimenopausal women's use of alternative therapies. (Obstet Gynecol 2002;100:18–25. © 2002 by The American College of Obstetricians and Gynecologists.)

From the Center for Health Studies, Group Health Cooperative, Seattle, Washington; Department of Epidemiology, University of Washington, Seattle, Washington; and Centers for Disease Control and Prevention, Atlanta, Georgia.

This work was supported by contract number U48/CCU009654 from the Centers for Disease Control and Prevention, and by the Office of Women's Health, Centers for Disease Control and Prevention, Atlanta, Georgia.

The authors wish to acknowledge Lou Grothaus for his biostatistical assistance.

The National Center for Complementary and Alternative Medicine at the National Institutes of Health defines alternative therapies as "those treatments and health care practices not taught widely in medical schools, not generally used in hospitals, and not usually reimbursed by medical insurance companies" (http://nccam.nih.gov/). Many therapies previously considered "alternative" are gaining mainstream acceptance, and some states have mandated that insurance companies cover their use. A national survey found that 42.1% of US adults used some type of alternative therapy in 1997, with 46.3% making visits to alternative providers at an estimated $27 billion in total annual out-of-pocket expenditures.[1] Alternative and complementary therapies are most widely used for chronic conditions.[1] Many therapies, including dietary soy,[2–7] isoflavone supplements,[8–11] herbs such as black cohosh,[12,13] and acupuncture[14] have been proposed for the relief of menopause symptoms, but the prevalence of use of such therapies for this purpose is unknown. We describe self-reported prevalence of the use of alternative therapies for menopause symptoms and examine subject characteristics associated with such use.

MATERIALS AND METHODS

The study was conducted at Group Health Cooperative, a health maintenance organization that provides medical care to more than 43,000 women aged 50–80 years in western Washington. Data were gathered as part of a follow-up survey for the EnPower Workbook Trial, a randomized trial in which we assessed the impact of a workbook designed to help women make informed decisions about the use of hormone replacement therapy (HRT).[15] We selected a simple random sample of 100 primary care providers with at least 100 women aged

0029-7844/02/$22.00
PII S0029-7844(02)02005-7

45–65 years in their patient panel. We then selected from each provider's panel a simple random sample of 12 women aged 45–65 years who had been enrolled at Group Health Cooperative for at least 2 years, and randomized the women to one of three intervention groups. Group 1 subjects were surveyed before and 6 months after receiving the workbook, group 2 subjects received both surveys but not the workbook, and group 3 subjects received the workbook in the mail with an introductory cover letter and were surveyed 6 months later. Because we found that the workbook had no significant effect on the use of alternative therapies, we combined the responses of women in all three groups who completed the telephone survey at 6 months (n = 886), and used 6-month data for all analyses.

Survey data included: demographic characteristics; attitudes and beliefs about HRT; menopausal symptoms; interactions with health care providers; history of, knowledge about, and perceived risk of osteoporosis, coronary heart disease, and breast cancer; health behaviors; and the use of alternative therapies. Study consent included permission to access automated medical and pharmacy records. Surveys and methods were approved by human subjects review committees at Group Health Cooperative, the University of Washington, and the Centers for Disease Control and Prevention.

Women were asked specific questions about eight alternative therapies: herbal, homeopathic, or naturopathic remedies (including pills, creams, teas, or solutions); visits to a homeopathic or naturopathic physician; visits to an herbalist; dietary soy products; acupuncture; massage therapy or other body work; chiropractic; and relaxation or stress management. For each type of therapy, women were asked if they had ever used it, if they were currently using it, if they had used or were currently using it for menopause symptoms, and if so, how helpful the approach was. Women were not queried about specific remedies used. Because of the small number of women who used some of the therapies for menopause symptoms, for most analyses, we grouped the therapies as any alternative therapy, body work (ie, massage therapy, chiropractic, acupuncture), dietary soy products, herbal, homeopathic, or naturopathic remedies (ie, over-the-counter herbs, homeopathic remedies, or visits to a naturopath, homeopath, or herbalist), and stress management. We asked only about a limited number of menopause symptoms, and data were not collected in such a way as to temporally link symptoms and the use of alternative therapies. Therefore, the alternative therapy questions allowed women the broadest possible definition of menopause symptoms and the greatest freedom to define their choice of a therapy to treat symptoms.

Women who were still having regular periods and were not using HRT were classified as premenopausal. Those with irregular periods who had at least one period in the 12 months before the survey, but who were not using HRT, were classified as perimenopausal. Those who had had a hysterectomy, those without a period in the 12 months before the survey, and those who were taking HRT were classified as postmenopausal. Body mass index was classified as normal (less than 25 kg/m^2), overweight (25 to less than 30 kg/m^2), or obese (30 kg/m^2 or more). Women were asked how frequently they engaged in walking, and in mild, moderate, or strenuous exercise. Exercise intensity was coded as the highest exercise level performed at least once a week. Alcohol use was classified based upon self-reported frequency of drinking any alcoholic beverages.

Because the use of alternative therapies might be influenced by a woman's provider, all analyses were done using generalized estimating equations (GEE)[16] to account for any within-provider correlation in responses (using the GENMOD procedure in SAS [SAS Institute, Cary, NC]). The GEE analyses gives P values, standard errors, and confidence intervals, which account for any within-provider correlation. We first did a series of "bivariate-like" logistic regression analyses in GEE to determine the factors most strongly associated with the likelihood of using alternative therapies versus not using them. These analyses all controlled for age and intervention group. Variables associated with the use of a given therapy at $P \leq .10$ were then entered together into a multivariable GEE logistic model. Those variables that remained significant at $P \leq .10$ were retained in the final GEE models.

RESULTS

A total of 886 women participated in the 6-month telephone survey (87.2% response rate after excluding ineligible women). Reasons for ineligibility included: language or hearing (16); out of town (eight); sampling error (employee or the spouse of an employee at our research center, or male sex, eight); disenrolled from Group Health Cooperative (six); deceased (four); too ill (three); and conflicting study (one). A mean of 5.8 calls were attempted to reach each of these 886 women, and the mean survey duration was 30 minutes. Participants were primarily white, well educated, and married (Table 1), reflecting the general population in western Washington.

The alternative therapy with the highest prevalence of ever use was relaxation or stress management (43.1%), followed by herbal, homeopathic, or naturopathic remedies (37.0%), chiropractic (31.6%), massage therapy (29.5%), dietary soy products (22.9%), acupuncture

Table 1. Subject Characteristics, by Use of Alternative Therapies to Manage Menopause Symptoms (n = 886)

Characteristic	n	Percent				
		Any alternative therapy	Body work	Dietary soy products	Herbal, homeopathic, naturopathic remedies	Stress management
Age (y)						
45–55	663	24.6*	4.3†	9.2†	14.9	10.4*
56–65	253	15.8	0.8	3.2	10.7	5.9
Race						
White	794	21.7	3.2	7.8	12.6*	9.3
Other	93	25.5	3.9	4.9	21.6	7.8
Education						
≤ High school	191	14.1†	0.0‡	3.1†	9.4	3.7†
Some college	322	23.0	2.5	7.5	14.3	10.3
College graduate	373	25.5	5.6	9.7	15.3	11.0
Marital status						
Married	645	21.4	3.3	7.6	13.5	9.2
Not married	241	24.1	3.3	7.1	14.1	9.1
Current menopause status						
Premenopausal	184	20.7	2.2	11.4§	14.1	6.5
Perimenopausal	74	33.8	4.1	14.9	16.2	18.9
Postmenopausal	623	20.9	3.5	5.3	13.2	8.5
Hot flashes						
None	175	14.9†	2.3	5.1	9.1	5.7†
Mild	269	21.6	2.6	7.4	14.1	7.1
Moderate	260	27.3	5.0	9.6	16.9	13.1
Severe	181	22.7	2.8	6.6	12.7	9.9
Night sweats						
None	311	16.4§	2.9	5.5*	10.0*	6.1†
Mild	253	22.1	3.2	7.9	14.2	9.5
Moderate	215	27.9	4.2	8.8	18.1	11.2
Severe	106	27.4	2.8	9.4	14.2	13.2
Trouble sleeping						
None	223	12.1§	0.9§	3.6*	9.9§	3.6§
Mild	270	20.4	2.2	8.5	10.4	8.5
Moderate	260	27.3	4.6	9.2	16.9	11.2
Severe	72	32.8	6.9	8.4	20.6	16.0
HRT use						
Current	410	18.8‡	2.9	4.9†	10.5*	8.8
Past	115	27.8	7.0	7.0	18.3	9.6
Never	360	24.2	2.5	10.6	15.8	9.4
Who makes HRT decision?						
I do	222	26.6†	4.1	9.5	16.2‡	7.7
Make together	632	21.4	3.2	7.0	13.3	9.8
Provider	31	6.5	0.0	3.2	3.2	6.5
Talked with provider about HRT						
No	256	14.5§	1.6‡	5.1‡	10.2‡	4.7†
Yes	628	25.2	4.0	8.3	15.1	11.0
Personal history of breast cancer						
No	850	21.7‡	3.3	6.8§	13.4	8.9
Yes	35	34.3	2.9	22.9	20.0	14.3
Personal history of heart disease						
No	847	22.2	3.4	7.3	13.6	9.3
Yes	37	16.2	4.0	8.3	15.1	5.4
Body mass index (kg/m^2)						
<25	368	22.8	4.1	9.0	13.2	10.9‡
25–29	269	23.8	2.2	7.4	16.4	8.2
≥30	221	18.6	2.7	5.0	10.9	6.3

(continued)

Table 1. Continued

Characteristic	*n*	Percent				
		Any alternative therapy	Body work	Dietary soy products	Herbal, homeopathic, naturopathic remedies	Stress management
Highest level of alcohol consumption (number of drinks)						
None	333	20.4	2.1‡	6.0	12.6	8.1
≥1/month	307	22.8	2.9	7.5	14.7	8.1
≥1/wk	200	25.5	6.0	9.5	15.0	13.0
≥1/day	45	15.6	2.2	8.9	8.9	6.7
Smoking						
Never	479	22.3	2.7	7.3*	14.0	9.0
Past	105	15.2	1.9	2.9	11.4	6.7
Current	302	24.2	4.6	9.3	13.9	10.3
Highest exercise level						
None	47	10.6§	4.3	4.3§	6.4	0.0§
Walking only	103	12.3	2.8	1.9	7.6	5.7
Mild	118	19.5	1.7	2.5	14.4	4.2
Moderate	176	25.6	4.0	10.8	14.2	10.8
Strenuous	439	25.1	3.4	9.1	15.5	11.6

Body work includes massage therapy, chiropractic, or acupuncture. Herbal, homeopathic, or naturopathic remedies include over-the-counter products and visiting a provider. Exercise coded as highest intensity performed at least one time per wk (0 = none, 1 = walks, 2 = mild, 3 = moderate, 4 = strenuous).

HRT = hormone replacement therapy.

* $P \leq .05$.

† $P \leq .01$.

‡ $P \leq .10$.

§ $P \leq .001$.

(10.4%), visits to a homeopathic or naturopathic physician (9.4%), and visits to an herbalist (4.6%) (Figure 1). The prevalence of use specifically for menopause symptoms was relaxation or stress management (9.1%), herbal, homeopathic, or naturopathic remedies (13.1%), chiropractic (0.9%), massage therapy (2.6%), dietary soy products (7.4%), acupuncture (0.6%), visits to a homeopathic or naturopathic physician (2.0%), and visits to an herbalist (1.2%). When all of the alternative therapies were considered together, 76.1% of women had used at least one type therapy, and 22.1% of women had used at least one therapy specifically for menopause symptoms. Women who used any of these therapies for menopause symptoms were consistently positive in their assessment of their effectiveness; between 25–69% of women reported that they were somewhat helpful, and 22–75% reported that they were very helpful (Figure 2).

When asked whether "For menopausal problems, natural approaches such as nutrition, vitamins, and exercise are better than taking hormone pills," 14.2% of all women strongly agreed, 46.8% agreed, 4.8% disagreed, 31.1% strongly disagreed, and 2.7% did not know. Thus, nearly two-thirds of the women favored natural approaches to managing menopause. Agreement was highest among women who were not current HRT users and lowest among those who were current HRT users (Figure 3). Even so, 13% of women who strongly agreed and 36% of those who agreed that natural approaches are better than taking hormone pills were current HRT users. Among current HRT users, the proportion of women who were concurrently using alternative therapies to manage menopause symptoms was 8.1% for homeopathic, naturopathic, or herbal medicines, 8.1% for stress management, 4.4% for dietary soy products, and 2% for massage therapy or other body work. Fewer than 1% of current HRT users were visiting naturopathic or homeopathic physicians, visiting herbalists, using chiropractic, or using acupuncture to manage menopause symptoms.

In Table 1, subject characteristics are summarized by women's use of any alternative therapy, body work, dietary soy products, herbal, homeopathic, and naturopathic remedies and providers, and stress management. Final GEE models, showing the prevalence odds ratios for those characteristics associated with use of alternative therapies at $P \leq .10$ are presented in Table 2. Sleep disturbances, and having talked with a provider about HRT, were associated with an increased likelihood of using each of the alternative therapies studied, and there was a six-fold increase in use of dietary soy for menopause symptoms among women with a history of breast cancer.

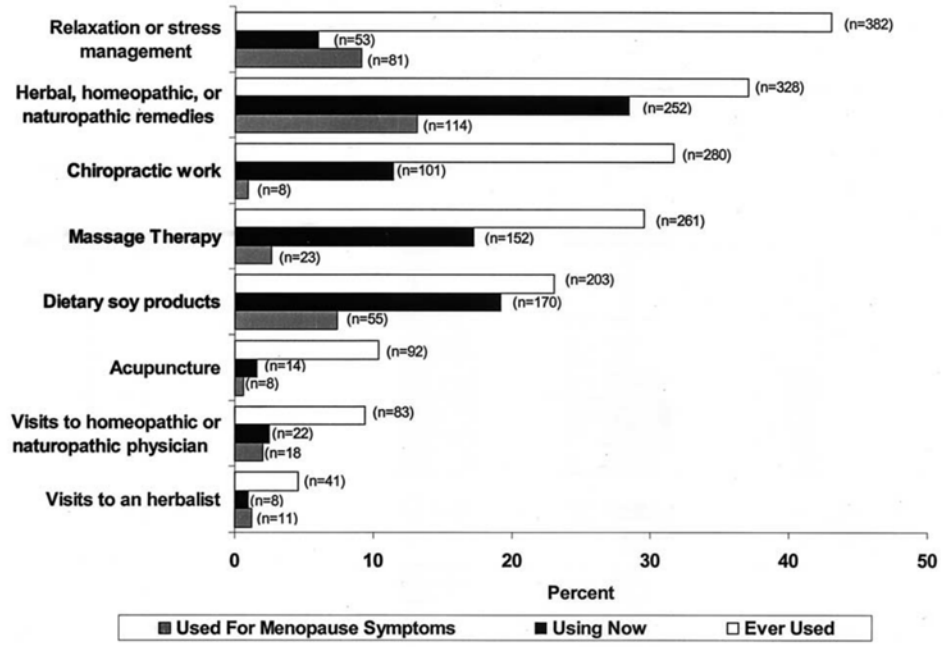

Figure 1. Proportion of women who reported using alternative therapies for any reason and for menopause symptoms.
Newton. Alternatives for Menopause. Obstet Gynecol 2002.

DISCUSSION

In this study of women aged 45–65 years, a large proportion of women reported using at least one type of alternative therapy to help them manage menopause symptoms. The most commonly used therapies were stress management, herbal, homeopathic, or naturopathic remedies or providers, and dietary soy products. Despite the widely held belief that natural approaches

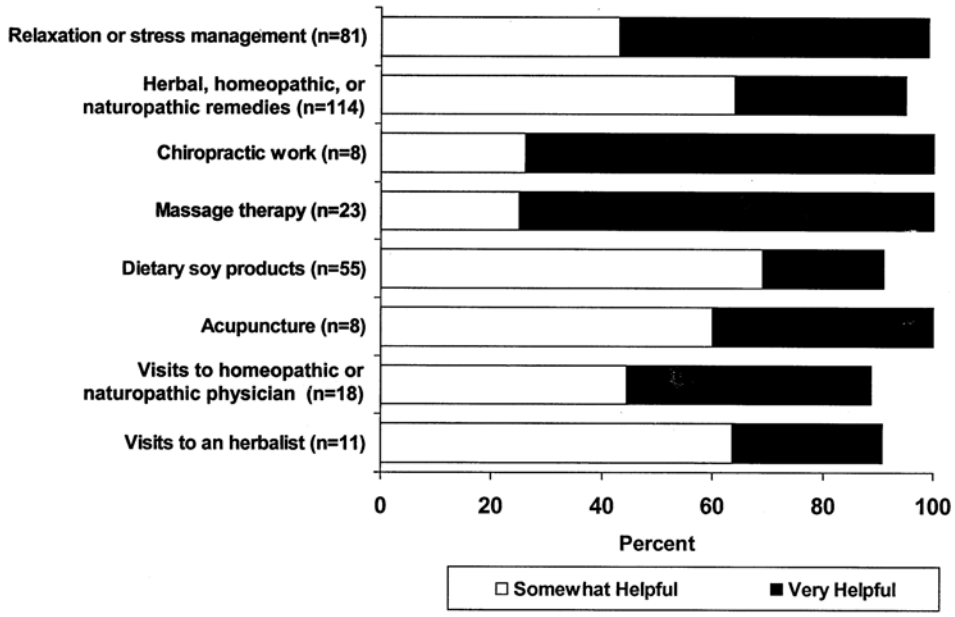

Figure 2. Among women who used alternative therapies for menopause symptoms, proportion who found each therapy very helpful or somewhat helpful for symptom relief.
Newton. Alternatives for Menopause. Obstet Gynecol 2002.

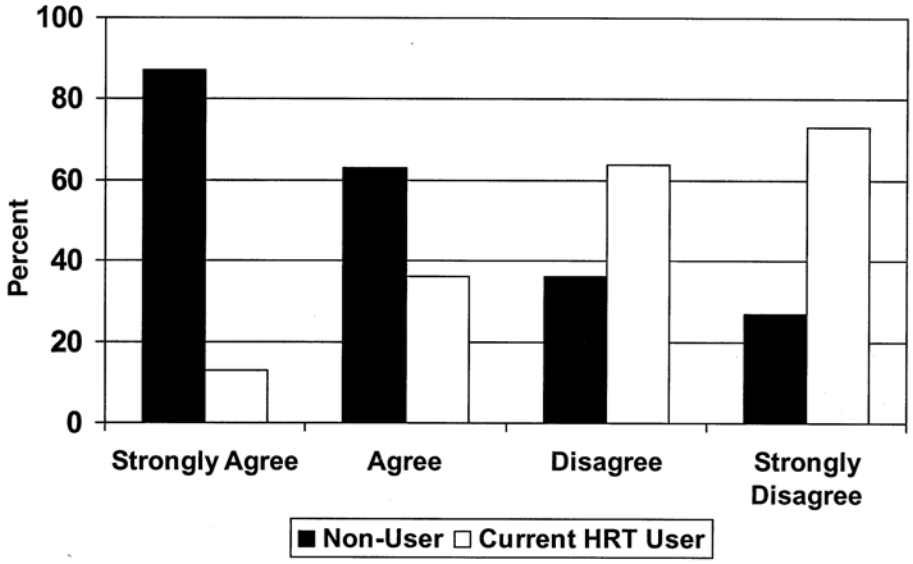

Figure 3. Use of hormone replacement therapy (HRT), by response to the statement "Natural approaches to menopause are better than using HRT."

Newton. Alternatives for Menopause. Obstet Gynecol 2002.

are superior to pharmacologic approaches for the management of menopause symptoms, many women were using HRT. These findings are consistent with those of Eisenberg et al who found, in a 1997 population-based US survey, that 42.1% of interviewees had used "alternative therapies" in the prior year and that 46.3% of those had seen an alternative therapies provider.[1] In that study, herbal remedies and relaxation techniques were

Table 2. Association Between Selected Variables and Ever Using Any Alternative Therapies; Body Work; Dietary Soy Products; Herbal, Homeopathic, or Naturopathic Remedies; and Stress Management for Relief of Menopause Symptoms*

	Odds ratio (95% confidence limits)				
Characteristics	Any alternative therapy	Body work	Dietary soy products	Herbal, homeopathic, or naturopathic remedies	Stress management
White (vs other race/ethnicity)				0.47 (0.28, 0.81)	
Perimenopausal (vs premenopausal)	1.27 (0.65, 2.40)		0.88 (0.38, 2.03)		
Postmenopausal (vs premenopausal)	0.64 (0.38, 1.08)		0.26 (0.14, 0.49)		
Hot flashes (yes vs no)	1.74 (1.13, 2.67)				
Night sweats (yes vs no)				1.51 (0.94, 2.43)	
Sleep disturbances (yes vs no)	2.46 (1.57, 3.86)	4.07 (0.98, 16.89)	2.59 (1.09, 6.11)	1.61 (0.93, 2.77)	3.11 (1.51, 6.40)
Current HRT use (vs never)	0.46 (0.30, 0.71)			0.48 (0.29, 0.77)	
Past HRT use (vs never)	0.88 (0.51, 1.53)			1.00 (0.55, 1.81)	
Talked with provider about HRT (yes vs no)	2.52 (1.63, 3.89)	2.78 (0.93, 8.93)	2.65 (1.40, 5.03)	1.96 (1.14, 3.36)	2.37 (1.30, 4.33)
Personal history of breast cancer (yes vs no)			6.23 (2.54, 15.28)		
Increasing level of exercise	1.26 (1.10, 1.44)		1.37 (1.07, 1.77)	1.22 (1.02, 1.45)	1.47 (1.18, 1.84)

Body work includes massage therapy, chiropractic, acupuncture, etc. Herbal, homeopathic, or naturopathic remedies include over-the-counter products and visiting a provider. Exercise coded as highest intensity performed at least one time per wk (0 = none, 1 = walks, 2 = mild, 3 = moderate, 4 = strenuous).

Abbreviation as in Table 1.

* Controlled for age.

among the most widely used therapies. We found, as they did, that use of alternative therapies was associated with younger age and higher education.

Of particular interest was our finding regarding dietary soy products. Dietary soy products and soy isoflavones have been suggested as possible alternatives to HRT, although the current evidence base for these products is modest.[2–11] We found evidence of the diffusion of the belief in dietary soy as an HRT alternative among women with a personal history of breast cancer, who were six times as likely to use dietary soy for the relief of menopause symptoms as were other women. However, we could not determine the cause of the increased use of dietary soy products among women with a history of breast cancer. Our current understanding about the effects of dietary soy products or soy isoflavones on the breast is limited, and sound scientific evidence about the advisability of this approach in women with a history of breast cancer is lacking.

The treatment of menopause symptoms is associated with a large placebo effect.[17] In our study, almost all women who used alternative therapies for menopause symptoms believed in the benefits of the approach they chose. This belief may reflect the actual effectiveness of these approaches. The natural regression of menopause symptoms, self-selection, placebo effect, and recall bias may also contribute to this finding. Our findings suggest that observational studies will be severely hampered in their ability to answer questions about the efficacy of alternative therapies for menopause, and clearly point to the need for randomized, blinded trials to evaluate the efficacy of alternative therapies. The strengths of our study include the population-based approach, the large number of women interviewed, the high response rate, and our ability to distinguish use of alternative therapies specifically for menopause symptoms. Because of the cross-sectional nature of the data, we are unable to address the temporal sequence of events, and we did not elicit the specific reasons women chose to use each therapy or details about specific remedies.

Our sample was drawn from women who were health maintenance organization enrollees, and though the demographic characteristics of our participants resemble those of the health maintenance organization as a whole, and those of women in western Washington state, they are not representative of the nation. Furthermore, Washington state has an extremely active naturopathic community. Bastyr University in Seattle has a postgraduate training course in naturopathy, and naturopaths are licensed to practice in Washington state. The demographics of our participants and a climate that favors the use of naturopathic remedies may lessen the generalizability of our results.

One of our objectives was to ascertain the general categories of therapies women were most frequently using for any purpose, as well as specifically to manage menopause symptoms. These data will guide us in conducting more detailed surveys in the future. Further inquiries might include what stress management approaches women use, what herbs and naturopathic remedies they prefer, and how they modify their diet to increase soy intake. The data collected here provide insight into the use of alternative therapies for menopause and reinforce the need for health care providers to routinely ascertain the use of alternative therapies for this purpose. Such inquiry could enhance the doctor-patient dialogue and lead to a better understanding of women's needs when managing menopausal symptoms.

REFERENCES

1. Eisenberg DM, Davis RB, Ettner SL, Appel S, Wilkey S, Van Rompay M, et al. Trends in alternative medicine use in the United States, 1990–1997: Results of a follow-up national survey. JAMA 1998;280:1569–75.
2. Murkies A, Lombard C, Strauss B, Wilcox G, Burger H, Morton M. Dietary flour supplementation decreases postmenopausal hot flushes: Effect of soy and wheat. Maturitas 1995;21:189–95.
3. Quella SK, Loprinzi CL, Barton DL, Knost JA, Sloan JA, LaVasseur BI, et al. Evaluation of soy phytoestrogens for the treatment of hot flashes in breast cancer survivors: A North Central Cancer Treatment Group Trial. J Clin Oncol 2000;18:1068–74.
4. St Germain A, Peterson CT, Robinson JG, Alekel DL. Isoflavone-rich or isoflavone-poor soy protein does not reduce menopausal symptoms during 24 weeks of treatment. Menopause 2001;8:17–26.
5. Nagata C, Takatsuka N, Kawakami N, Shimizu H. Soy product intake and hot flashes in Japanese women: Results from a community-based prospective study. Am J Epidemiol 2001;153:790–3.
6. Washburn S, Burke GL, Morgan T, Anthony M. Effect of soy protein supplementation on serum lipoproteins, blood pressure, and menopausal symptoms in perimenopausal women. Menopause 1999;6:7–13.
7. Albertazzi P, Pansini F, Bonaccorsi G, Zanotti L, Forini E, De Aloysio D. The effect of dietary soy supplementation on hot flushes. Obstet Gynecol 1998;91:6–11.
8. Scambia G, Mango D, Signorile PG, Anselmi Angeli RA, Palena C, Gallo D, et al. Clinical effects of a standardized soy extract in postmenopausal women: A pilot study. Menopause 2000;7:105–11.
9. Upmalis DH, Lobo R, Bradley L, Warren M, Cone FL, Lamia CA. Vasomotor symptom relief by soy isoflavone extract tablets in postmenopausal women: A multicenter, double-blind, randomized, placebo-controlled study. Menopause 2000;7:236–42.

10. Vincent A, Fitzpatrick LA. Soy isoflavones: Are they useful in menopause? Mayo Clin Proc 2000;75:1174–84.
11. North American Menopause Society. The role of isoflavones in menopausal health: Consensus opinion of The North American Menopause Society. Menopause 2000;7: 215–29.
12. Hardy ML. Herbs of special interest to women. J Am Pharm Assoc (Wash) 2000;40:234–42.
13. Jacobson JS, Troxel AB, Evans J, Klaus L, Vahdat L, Kinne D, et al. Randomized trial of black cohosh for the treatment of hot flashes among women with a history of breast cancer. J Clin Oncol 2001;19:2739–45.
14. Wu L, Zhou X. 300 cases of menopausal syndrome treated by acupuncture. J Tradit Chin Med 1998;18: 259–62.
15. LaCroix A, Newton K. Population-based strategy for improving informed decision making about hormone replacement therapy in managed care settings. Women's Health Issues 1999;9:306–18.
16. Liang KY, Zeger SL. Longitudinal data analysis using generalized linear models. Biometrika 1986;73:13–22.
17. Notelovitz M, Lenihan JP, McDermott M, Kerber IJ, Nanavati N, Arce J. Initial 17beta-estradiol dose for treating vasomotor symptoms. Obstet Gynecol 2000;95: 726–31.

Address reprint requests to: Katherine M. Newton, PhD, Group Health Cooperative of Puget Sound, Center for Health Studies, 1730 Minor Avenue, Suite 1600, Seattle, WA 98101; E-mail: newton.k@ghc.org.

Received August 7, 2001. Received in revised form January 22, 2002. Accepted February 14, 2002.